iv

for wrapping floral groupings and flower pots and for producing decorative grass in accordance with the present invention.

**[0007]** Fig. 3 is a perspective view of a sheet of material having a three-dimensional pattern disposed on a lower surface thereof and a bonding material disposed on an upper surface along one edge thereof, a floral grouping being disposed on the upper surface of the sheet of material.

**[0008]** Fig. 4 is a perspective view of the floral grouping of Fig. 3 being wrapped with the sheet of material having a three-dimensional pattern on the lower surface thereof by one method of wrapping wherein the sheet of material is provided with a bonding material on the upper surface thereof.

**[0012]** Fig. 8 is perspective view of a decorative cover positioned about the flower pot of Fig. 7 wherein the decorative cover is formed from a sheet of material having a three-dimensional pattern disposed thereon.



**[0014]** Fig. 10 is a perspective view of a floral sleeve formed from a sheet of material having a three-dimensional pattern disposed thereon.

**[0015]** Fig. 11 is a perspective view of the floral sleeve of Fig. 10 disposed about a floral grouping.

**[0016]** Fig. 12 is a perspective view of a floral sleeve having a cinching member wherein the floral sleeve is formed from a sheet of material having a three-dimensional pattern disposed thereon.

**[0017]** Fig. 13 is a perspective view of the floral sleeve of Fig. 12 disposed about a floral grouping.

**[0018]** Fig. 14 is a side view of a sleeve having a detachable portion wherein the sleeve is formed from a sheet of material having a three-dimensional pattern disposed thereon.

**[0020]** Fig. 16 is a perspective view of a flower pot disposed in the sleeve of Fig. 14 wherein an upper portion of the sleeve has been removed to provide a decorative cover having a skirt portion.

[0021] Fig. 17 is a perspective view of a preformed pot cover formed from a sheet of material having a three-dimensional pattern thereon.

**[0024]** Fig. 20 is a perspective view of a roll of material having a three-dimensional pattern disposed thereon and illustrating a knife edge being actuated by an actuator to cut at least a portion of the roll of material into elongated segments of decorative grass.

**[0025]** Fig. 21 is an enlarged, fragmental perspective view of one segment of decorative grass having a three-dimensional pattern disposed thereon.

**[0026]** Fig. 22 is an enlarged, fragmental perspective view of one segment of decorative grass having printed material thereon in addition to the three-dimensional pattern disposed thereon.

**[0027]** Fig. 23 is an enlarged, fragmental perspective view of one segment of decorative grass having embossed material thereon in addition to the three-dimensional pattern disposed thereon.

**[0028]** Fig. 24 is an enlarged, fragmental perspective view of one segment of decorative grass having printed material and embossed material thereon in addition to the three-dimensional pattern disposed thereon wherein the printed material and the embossed material are in register with one another.

**[0029]** Fig. 25 is an enlarged, fragmental perspective view of one segment of decorative grass having printed material and embossed material thereon in addition to the three-dimensional pattern disposed thereon wherein the printed material and the embossed material are out of register with one another.

[0030] The present invention comprises methods of wrapping floral groupings, flower pots containing potted plants or other pot means with a sheet of material having a three-dimensional pattern to provide a decorative cover or sleeve for such floral groupings or flower pots containing potted plants. The present invention also comprises methods for producing decorative grass having a three-dimensional pattern. The methods comprise providing a sheet of material having a three-dimensional pattern and wrapping the sheet of material about a floral grouping or a flower pot to provide a decorative cover having a three-dimensional pattern; or by cutting a sheet or roll of material having a three-dimensional pattern to provide segments of decorative grass which have a predetermined width and length.

K

[0033] As shown in Fig. 2, the outer peripheral edge 18 of the sheet of material 10 comprises a first side 20, a second side 22, a third side 24, and fourth side 26. A bonding material 27 (Figs. 3 and 4) may be disposed on at least a portion of one or both surfaces of the sheet of material 10, such as the

upper surface 14 thereof as shown in Fig. 3 and 4 and as further illustrated in U.S. Patent No. 5,181,364, the specification of which is hereby expressly incorporated herein by reference.

[0034] The sheet of material 10 has a three-dimensional pattern 28 on at least a portion of one of the upper or lower surfaces 14 and 16 thereof, such as the lower surface 16 as shown in Figs. 1 and 4-6. The three-dimensional pattern 28 may be of any geometrical shape or design which will enhance the aesthetic qualities of a decorative cover 36 or 36a (Figs. 5 and 6) formed from the sheet of material 10. That is, the three-dimensional pattern 28 may be a lace pattern, curlicues, paisleys, swirls, squiggles, and any shape generally associated with botanical items such as leaves, petals, stems, roots, fruits and any other biomorphic shapes. Further, the three-dimensional pattern 28 can be produced in any suitable manner, such as by embossing or printing with a foamable ink which can be of a single color, or portions of the threedimensional pattern 28 may be printed with foamable inks of different colors so that a portion of the three-dimensional pattern 28 is printed in at least a first color and other portions of the three-dimensional pattern 28 are printed in at least a second color such that the three-dimensional pattern 28 consists of multiple colors.

[0035] . The three-dimensional pattern 28 may cover only a portion of the sheet of material 10 or may cover an entire surface of the sheet of material 10, or may cover all exposed and/or interior surfaces of the sheet of material 10. The sheet of material 10 having the three-dimensional pattern 28 may be employed to provide a decorative cover for a floral grouping (Figs. 5 and 6) or a decorative cover for a flower pot (Fig. 8); or it may be employed to provide a sleeve for wrapping or covering a floral grouping (Figs. 11 and 13) or a flower pot (Figs. 15 and 16); or it may be employed to form a preformed flower pot cover for covering a flower pot (Figs. 17 and 18); or it may be cut into segments to produce decorative grasses (Figs. 20-25). The use of the sheet of material 10 having the three-dimensional pattern 28 to form a decorative cover for a floral grouping or a flower pot, to form a sleeve for a floral grouping or a flower pot, or to form a preformed flower pot cover or to form decorative grass will be described in more complete detail herein.

**[0036]** As noted above, the sheet of material 10 having the three-dimensional pattern 28 can be utilized to form a decorative cover for a floral grouping or a flower pot. The term "flower pot" as used herein refers to any type of container for holding a floral grouping, or a plant, or even another pot type container. Examples of flower pots and/or pot type containers include, but are not limited to, clay pots, wooden pots, plastic pots, pots made from natural

and/or synthetic fibers, or any combination thereof. Such flower pots and or pot-type containers are provided with a retaining space for receiving a floral grouping. The floral grouping may be disposed within the retaining space of the flower pot with a suitable growing medium described in further detail below, or other retaining medium, such as a floral foam. It will also be understood that in some cases the floral grouping, and any appropriate growing medium or other retaining medium, may be disposed in a sleeve formed from the sheet of material 10 having a three-dimensional pattern 28 if the sleeve is adapted to contain a medium.

[0042] Any thickness or stiffness of the sheet of material 10 may be utilized in accordance with the present invention as long as the sheet of material 10 having the three-dimensional pattern 28 may be wrapped about at least a portion of a flower pot or a floral grouping or cut into segments to produce decorative grass, as described herein. Stiffer sheets may be scored to facilitate their folding. The sheet of material 10 preferably has a thickness of from about 0.1 mil to about 30 mil. Typically, the sheet of material 10 has a thickness in a range of about 0.5 mil to about 2.5 mil.

[0044] The term "polymer film" when used herein means a man-made polymer, such as a polypropylene or a naturally occurring polymer, such as

cellophane. A polymer film is relatively strong and not as subject to tearing (substantially non-tearable), as might be the case with paper or foil.

[0045] The sheet of material 10 may also be constructed, in whole or in part, from a cling material. "Cling Wrap or Material" when used herein means any material which is capable of connecting to the sheet of material and/or itself upon contacting engagement during the wrapping process and is wrappable about an item, whereby portions of the cling material contactingly engage and connect to other portions of another material, or, alternatively, itself, for generally securing the material wrapped about at least a portion of a flower pot or a floral grouping. This connecting engagement is preferably temporary in that the material may be easily removed, i.e., the cling material "clings" to the flower pot or floral grouping.

[0046] The cling material is constructed, and treated if necessary, from polyethylene such as Cling Wrap made by Glad®, First Brands Corporation, Danbury, Connecticut. The thickness of the cling material will, in part, depend upon the size of sleeve or cover and the size of the flower pot or floral grouping in the sleeve or cover, i.e., generally, a larger flower pot may require a thicker and therefore stronger cling material. The cling material will range in thickness from about 0.1 mil to about 10 mil, and preferably from about 0.5 mil to about

2.5 mil and most preferably from about 0.6 mil to about 2 mil. However, any thickness of cling material may be utilized in accordance with the present invention which permits the cling material to be printed with a foamable ink composition so as to provide the cling material with a three-dimensional printed pattern which is capable of functioning as described herein.

[0047] In one embodiment, the sheet of material 10 may be constructed from two polypropylene films wherein at least a lower or outer surface of one of the sheets polypropylene film is provided with a three-dimensional pattern. The sheets of polypropylene film having the three-dimensional pattern employed to produce the sheet of material 10 may be connected together or laminated or may be separate layers. In an alternative embodiment, the sheet of material 10 may be constructed from only one sheet of polypropylene film having a three-dimensional pattern.

[0048] The sheet of material 10 may vary in color. Further, the sheet of material 10 may comprise other decorative patterns or designs in addition to the three-dimensional pattern 28 which are printed, etched, and/or embossed thereon. In addition, the sheet of material 10 may have various colorings, coatings, flocking and/or metallic finishes, applied separately or simultaneously, or may be characterized totally or partially by pearlescent, opaque, translucent,



transparent, tinted, iridescent or the like, qualities. Each of the above-named characteristics may occur alone or in combination. Moreover, each surface of the sheet of material 10 may vary in the combination of such characteristics.

**[0050]** A plurality of sheets of material 10 may be connected together to form a roll as is shown in U.S. Patent No. 5,459,976, issued October 24, 1995 to Weder et al., entitled "MATERIAL AND ADHESIVE STRIP DISPENSER", the specification of which is hereby expressly incorporated in its entirety herein by reference.

[0051] The ink compositions which can be applied to the sheet of material 10 to produce the three-dimensional pattern 28 on the sheet of material 10 can be any ink composition, either solvent-based or water-based, which is compatible with the sheet of material 10 and which contains a foaming agent capable of foaming the ink composition on curing to produce the three-dimensional pattern 28. Such foamable ink compositions are well known in the printing art. However, for environmental reasons it is preferred that the foamable ink composition be a water-based ink composition. An example of a foamable water-based ink composition which can be employed to produce the three-dimensional pattern 28 on the sheet of material 10 is disclosed in U.S. Patent No. 5,594,048 entitled "Water Based Ink Composition Free Of Volatile

6

Organic Compounds For Disposition On A Substrate", the specification of which is hereby expressly incorporated in its entirety herein by reference.

[0053] Figs. 3-6 illustrate the wrapping of a floral grouping 34 with the sheet of material 10 having a three-dimensional pattern 28 to provide a decorative cover 36 for the floral grouping 34. The sheet of material 10 (which may optionally have the strip of bonding material 27 disposed upon the upper surface 14, the lower surface 16 or both, such as the strip of bonding material 27 disposed along at least a portion of the upper surface 14 so as to be disposed substantially adjacent the fourth side 26 of the sheet of material 10 as shown in Figs. 3 and 4) is provided, either as an individual sheet of material 10 or from a pad or roll of material and the like.

[0055] Referring more specifically to Fig. 3, the floral grouping 34 is placed upon the upper surface 14 of the sheet of material 10 in a diagonal orientation. The floral grouping 34 has an upper bloom or foliage portion 42 and a lower stem portion 44. As shown in Figs. 3-5, the sheet of material 10 is then wrapped about the floral grouping 34 by the operator, the operator overlapping a portion of the sheet of material 10 over another portion of the sheet of material 10. That is, for example, the operator places the first side 20 of the sheet of material 10 over the floral grouping 34, as shown in Fig. 4. The

operator continues to roll the floral grouping 34 and the sheet of material 10 in the direction toward the second side 22 of the sheet of material 10 until the upper surface 14 adjacent to the fourth side 26 firmly engages the lower surface 16 of the sheet of material 10 and the floral grouping 34 is substantially encompassed by the sheet of material 10. Thus, the bonding material 27 disposed on the upper surface 14 of the sheet of material 10 contacts the lower surface 16 of the sheet of material 10 to provide the decorative cover 36 which substantially encompasses and surrounds a substantial portion of the floral grouping 34. Figure 5 shows the floral grouping 34 wrapped in a conical fashion with the bloom end 42 exposed near an open upper end 38 of the decorative cover 36 and the stem end 44 exposed near a lower end 40 of the decorative cover 36.

[0056] In another embodiment, illustrated in Fig. 6, the sheet of material 10 is utilized to wrap the floral grouping 34. The floral grouping 34 is disposed upon the sheet of material 10 approximately parallel to the fourth side 26 of the sheet of material 10. The sheet of material 10 is then wrapped generally about the stem portion 44 of the floral grouping 34 to a position wherein the fourth side 26 of the sheet of material 10 generally overlaps the third side 24 of the sheet of material 10 in a cylindrical fashion. It should be noted that the sheet of material 10 may be wrapped a plurality of times about the stem portion 44

of the floral grouping 34 before the overlapping of the third side 24 and the fourth side 26 of the sheet of material 10. As before, the portion of the sheet of material 10 near the fourth side 26 is disposed generally adjacent another portion of the sheet of material 10 and the two adjacent portions then are brought into contact where they may be bondingly engaged, thereby securing the sheet of material 10 generally about the floral grouping 34 so as to provide a decorative cover 36a for the floral grouping 34 wherein the decorative cover 36a has an open upper end 38a and an open lower end 40a.

by any one of numerous methods used to wrap sheets of material about flower pots to form decorative pot covers for flower pots, such as a decorative cover disposed about the flower pot 50 illustrated in Fig. 8. The sheet of material 10 may, for example, be formed by hand about the outer peripheral surface 56 of the flower pot 50 to produce the decorative cover 63. The decorative cover 63 can then be secured about the flower pot 50 by a bonding material or by an elastic band 64 such that the open upper end 52 of the flower pot 50 remains substantially uncovered by the decorative cover 63, substantially as shown in Fig. 8.

**[0059]** Referring now to Fig. 9, a flower pot cover former and band applicator device 66 for forming the sheet of material 10 into the decorative cover 63 for the flower pot 50 is illustrated. The flower pot cover former and band applicator device 66 comprises a band applicator 68 and a flower pot cover former 70. The flower pot cover former and band applicator device 66 has a support platform 72 with an opening 74 formed therein. A band, such as elastic band 64, is disposed circumferentially about the opening 74 in the support platform 72.

[0063] The bonding material may cover a portion of the upper surface 14 of the sheet of material 10, or the bonding material may entirely cover the upper surface 14 of the sheet of material 10. The bonding material may be disposed on the upper surface 14 of the sheet of material 10 in the form of a strip or in the form of spaced-apart spots. One method for disposing a bonding material on the sheet of material 10 is described in U.S. Patent No. 5,111,637, entitled "Method For Wrapping A Floral Grouping", issued to Weder et al. on May 12, 1992, which is hereby expressly incorporated herein by reference.

[0064] The term "bonding material" when used herein can mean an adhesive, frequently a pressure sensitive adhesive, or a cohesive, or any adhesive/cohesive combination having adhesive qualities (i.e., qualities of

adhesion or adhesion/cohesion, respectively) sufficient to cause the attachment of a portion of the sheet of material 10 to itself, to a floral grouping, or to a flower pot. Since the bonding material may comprise an adhesive and/or a cohesive, it will be appreciated that both adhesives and cohesives are known in the art, and both are commercially available. When the bonding material is a cohesive, a similar cohesive material must be placed on the adjacent surface for bondingly contacting and bondingly engaging with the cohesive material. The term "bonding material" also includes materials which are heat sealable and, in this instance, the adjacent portions of the material must be brought into contact and then heat must be applied to effect the seal. The term "bonding material" also includes materials which are sonic sealable and vibratory sealable. The term "bonding material" when used herein also means a heat sealing lacquer or hot melt material which may be applied to the material and, in this instance, heat, sound waves, or vibrations, also must be applied to effect the sealing.

[0065] The term "bonding material" when used herein also means any type of material or thing which can be used to effect the bonding or connecting of the two adjacent portions of the material or sheet of material to effect the connection or bonding described herein. The term "bonding material" may also include ties, labels, bands, ribbons, strings, tapes (including single or double-

sided adhesive tapes), staples or combinations thereof. Some of the bonding materials would secure the ends of the material, while other bonding materials may bind the circumference of a wrapper, or a sleeve, or, alternatively and/or in addition, the bonding materials would secure overlapping folds in the material and/or sleeve. Another way to secure the wrapping and/or sleeve is to heat seal the ends of the material to another portion of the material. One way to do this is to contact the ends with an iron of sufficient heat to heat seal the material.

[0066] Alternatively, a cold seal adhesive may be utilized as the bonding material. The cold seal adhesive adheres only to a similar substrate, acting similarly as a cohesive, and binds only to itself. The cold seal adhesive, since it bonds only to a similar substrate, does not cause a residue to build up on equipment, thereby both permitting much more rapid disposition and use of such equipment to form articles and reducing labor costs. Further, since no heat is required to effect the seal, the dwell time, that is, the time for the sheet of material to form and retain the shape of an article, such as a flower pot cover or flower pot, is reduced. A cold seal adhesive binds quickly and easily with minimal pressure, and such a seal is not readily releasable. This characteristic is different from, for example, a pressure sensitive adhesive.

[0067] The term "bonding material" when used herein also means any heat or chemically shrinkable material, and static electrical or other electrical material, chemical welding material, magnetic material, mechanical or barbtype fastening material or clamps, curl-type characteristics of the film or materials incorporated in material which can cause the material to take on certain shapes, cling films, slots, grooves, shrinkable materials and bands, curl materials, springs, and any type of welding method which may weld portions of the material to itself or to the pot, or to both the material itself and the pot.

[0070] The sleeve 86 has an opening 94 at the upper end 88 and may be open at the lower end 90, or closed with a bottom at the lower end 90. The sleeve 86 also has an inner peripheral surface 96 which, when the sleeve 86 is opened, defines and encompasses an inner retaining space 98. When the lower end 90 of the sleeve 86 is closed, a portion of the lower end 90 may be inwardly folded to form one or more gussets (not shown) for allowing the lower portion of the inner retaining space 98 to be expandable, for example, for receiving the circular bottom of a pot or growing medium.

[0071] The sleeve 86 is generally frusto-conically shaped, but the sleeve 86 may be, by way of example but not by way of limitation, cylindrical, frusto-conical, a combination of both frusto-conical and cylindrical, or any other shape,

as long as the sleeve 86 functions as described herein as noted above. Further, the sleeve 86 may comprise any shape, whether geometric, non-geometric, asymmetrical and/or fanciful, as long as it functions in accordance with the present invention. The sleeve 86 may also be equipped with drain holes (if having a closed bottom) or side ventilation holes (not shown), or can be made from gas permeable or impermeable materials.

[0073] In Fig. 11 the sleeve 86 is illustrated having the three-dimensional pattern 87 provided on the outer peripheral surface 92 of the sleeve 86. A floral grouping 100 is disposed within the inner retaining space 98 of the sleeve 86. Generally, an upper or bloom portion 102 of the floral grouping 100 is exposed near the opening 94 of the sleeve 86, and a lower or stem portion 104 of the floral grouping 100 is exposed near the lower end 90 of the sleeve 86. Either end of the sleeve 86 may be closed about the floral grouping 100. Generally, a portion of the sleeve 86 is tightened about a portion of the stem portion 104 of the floral grouping 100 for holding the decorative cover 82 about the floral grouping 100. For example, the sleeve 86 may be held by a tie 106 tied about the sleeve 86, such as is shown in Fig. 11. Other methods for binding the sleeve 86 may be employed, such as the bonding materials described elsewhere herein.

[0074] Similarly, it generally may be desired to use the sleeve 86 as a decorative cover for a flower pot (not shown). The flower pot will generally contain a botanical item or plant. The flower pot can be deposited into the open sleeve 86 in a manner well known in the art, such as manually, wherein the sleeve 86 is opened by hand and the flower pot deposited therein.

disposed as a strip or block on a surface of the sleeve 86. The bonding material may also be disposed upon either the outer peripheral surface 92 or the inner peripheral surface 96 of the sleeve 86, as well as upon the flower pot. Further, the bonding material may be disposed as spots of bonding material, or in any other geometric, non-geometric, asymmetric, or fanciful form, and in any pattern, including covering either the entire inner peripheral surface 96 and/or outer peripheral surface 92 of the sleeve 86 and/or the flower pot. The bonding material may be covered by a cover or release strip which can be removed prior to the use of the sleeve 86 or flower pot. The bonding material can be applied by methods known to those of ordinary skill in their art. One method for disposing a bonding material on a surface of the sleeve 86, in this case an adhesive, is described in U.S. Patent No. 5,111,637, which is hereby expressly incorporated herein by reference.

[0077] As noted above, a bonding material may be disposed on at least a portion of the inner peripheral surface 96 of the sleeve 86 (or any other sleeve described herein), or, alternatively, the bonding material may be disposed on an outer peripheral surface of a flower pot contained within the sleeve 86, while the sleeve 86 may be free of the bonding material. In a further alternative, the bonding material may be disposed both on at least a portion of the flower pot as well as upon at least a portion of the inner peripheral surface 96 of the sleeve 86. In addition, a portion of the bonding material may also be disposed on the outer peripheral surface 92 of the sleeve 86 as well. It will be understood that the bonding material may be disposed in a solid section of bonding material. The bonding material, when present, is disposed on the sleeve 86 and/or flower pot by any method known in the art.

[0079] Shown in Figs. 12 and 13 is a decorative cover 82a comprising a sleeve 86a having a three-dimensional pattern 87a disposed thereon, the decorative cover 82a being provided with a cinching tab 108 having a bonding material 110 disposed upon a surface thereof. The cinching tab 108 can be used to gather portions of the sleeve 86a together about the stem portion 104 of the floral grouping 100 as shown in Fig. 13 for holding the sleeve 86a tightly about the floral grouping 100.

[0080] Shown in Figs. 14 and 15 is another embodiment of a decorative cover 82b comprising a flexible bag or sleeve 86b constructed in accordance with the present invention and designated by the general reference numeral 86b. The sleeve 86b has a three-dimensional pattern 87b disposed thereon; and the sleeve 86b has a "detaching" element 112 in predetermined areas for detaching a portion of the sleeve 86b. The sleeve 86b generally initially comprises a flexible flat collapsed piece of material which is openable in the form of a tube or sleeve. The sleeve 86b is constructed of the same material and in the same way as described previously herein for the sleeve 86 and may be described exactly the same as the other sleeves described herein except for the additional elements described herein.

[0081] The sleeve 86b has an upper end 88b, a lower end 90b, and an outer peripheral surface 92b. The sleeve 86b has an opening 94b at the upper end 88b thereof, and the sleeve 86b may be open at the lower end 90b or closed with a bottom at the lower end 90b. In a flattened state, the sleeve 86b has a first side 113a and a second side 113b. The sleeve 86b also has an inner peripheral surface 96b which, when the sleeve 86b is opened, defines and encompasses an inner retaining space 98b as shown in Fig. 15. When the lower end 90b of the sleeve 86b has a closed bottom, a portion of the lower end 90b may be inwardly folded to form one or more gussets (not shown) for permitting

a circular bottom of an object such as a flower pot 117 to be disposed in the inner retaining space 98b of the lower end 90b of the sleeve 86b.

[0082] As shown in Figs. 14 and 15, the sleeve 86b is demarcated into an upper portion 114 and a lower portion 116. The lower portion 116 of the sleeve 86b is generally sized to contain the flower pot 117. The upper portion 114 of the sleeve 86b is sized to substantially surround and encompass a plant 118 contained in the flower pot 117 (Figs. 15 and 16) disposed within the lower portion 116 of the sleeve 86b. The sleeve 86b is demarcated into the upper portion 114 and the lower portion 116 by the detaching element 112 which enables the detachment of the upper portion 114 of the sleeve 86b from the lower portion 116 of the sleeve 86b. In the present version, the detaching element 112 is a plurality of generally laterally-oriented or alternating diagonally-oriented perforations which extend circumferentially across the outer peripheral surface 92b of the sleeve 86b from the first side 113a to the second side 113b.

[0083] In the embodiment shown in Figs. 14 and 15, the lower portion 116 of the sleeve 86b further comprises a base portion 120 and a skirt portion 122. The base portion 120 comprises that part of the lower portion 116 of the sleeve 86b which, when the flower pot 117 is placed into the lower portion 116 of the

sleeve 86b, has an inner peripheral surface 96b which is substantially adjacent to and surrounds the outer peripheral surface of the flower pot 117. The skirt portion 122 comprises that part of the lower portion 116 of the sleeve 86b which extends beyond an open upper end of the flower pot 117 and is substantially adjacent at least a portion of the plant 118 contained within the flower pot 117 and which is left to freely extend at an angle, inwardly or outwardly, from the base portion 120 when the upper portion 114 of the sleeve 86b is detached from the lower portion 116 of the sleeve 86b by actuation of the detaching element 112.

The upper portion 114 of the sleeve 86b is thereby separable from the lower portion 116 of the sleeve 86b by tearing the upper portion 114 along both the detaching element 124 and the detaching element 112, thereby separating the upper portion 114 from the lower portion 116 of the sleeve 86b. The lower portion 116 of the sleeve 86b remains disposed as the base portion 120 about the flower pot 117 and as the skirt portion 122 about the plant 118 contained in the flower pot 117, thereby forming a decorative cover 126 as shown in Figure 16, which substantially surrounds and encompasses the flower pot 117 and the plant 118 contained therein. The three-dimensional pattern 87b may be provided on only the lower portion 116 of the sleeve 86b, for example, the base and skirt portions 120 and 122, while the upper portion 114

is left unprinted or is printed with another design. When the upper portion 114 is detached from the lower portion 116 of the sleeve 86b, the lower portion 116 containing the three-dimensional pattern 87b is left.

[0087] In a general method of use of the sleeve 86b as a decorative cover for a flower pot, an operator provides the sleeve 86b, and the flower pot 117 having the plant 118 disposed in a growing medium contained within the flower pot 117. The operator then disposes the flower pot 117 having the plant 118 contained therein into the sleeve 86b by opening the sleeve 86b at its upper end 88b and assuring both that the opening 94b therein is in an open condition, and that the inner peripheral surface 96b of the sleeve 86b is somewhat expanded outward as well, as shown in Fig. 15. The operator then manually or automatically disposes the flower pot 117 into the opening 94b in the sleeve 86b, the flower pot 117 being disposed generally through the upper portion 114 of the sleeve 86b into generally the lower portion 116 of the sleeve 86b, the flower pot 117 remaining in the lower portion 116 of the sleeve 86b, permitting the sleeve 86b to substantially surround and tightly encompass the flower pot It will be understood that, alternatively, the sleeve 86b may be 117. provided with an extension (not shown) so that the sleeve 86b may be disposed on rods or wickets, whereby the flower pot 117 may then be disposed in the

sleeve 86b either before or after the sleeve 86b has been removed from the wickets.

[0089] Referring now to Figs. 17 and 18, a decorative preformed flower pot cover 128 is illustrated constructed from a sheet of material 130 having a three-dimensional pattern 132 on at least one surface thereof, such as a lower surface 134. The sheet of material 130 used in the construction of the decorative preformed flower pot cover 128 is identical to the sheet of material 10 having the three-dimensional pattern 28 thereon hereinbefore described with reference to Fig. 1.

[0091] The decorative preformed flower pot cover 128 may be constructed of one sheet of material 130 having the three-dimensional pattern 132 substantially as shown in Fig. 19, or a plurality of sheets of the same and/or different types of material may be employed in the formation of the decorative preformed flower pot cover 128. The thickness of the sheet of material 130 may vary widely, and any thickness of the sheet of material 130 may be utilized in accordance with the present invention as long as the sheet of material 130 is formable into the decorative preformed flower pot cover 128 as described herein. When the sheet of material 130 is constructed of a plurality of sheets

227

of material, each sheet of material may be connected to an adjacent sheet of material via a bonding material.

In the decorative preformed flower pot cover 128 may be formed using a conventional mold system 150 (Fig. 19) comprising a male mold 152 and a female mold 154 having a mold cavity 156 for matingly receiving the male mold 152. The sheet of material 130 having the three-dimensional pattern 132 thereon is positioned between the male and female molds 152 and 154, respectively. Movement of the male mold 152 in a direction 158 and into the mold cavity 156 forces the sheet of material 130 to be formed about the portion of the male mold 152 disposed in the mold cavity 156 of the female mold 154 so that, upon removal of the male mold 152 from mating engagement with the female mold 154 by movement of the male mold 152 in a direction 159, the decorative preformed pot cover 128 is recovered (substantially as shown in Fig. 17) and thereby forms the sheet of material 130 into the preformed decorative flower pot cover 128 (Fig. 18).

**[0094]** Further, in accordance with the present invention, the preformed flower pot cover 128 may have a bonding material disposed upon a portion thereof, and may contain printed material or designs and/or embossed material

on at least a portion thereof in addition to the three-dimensional pattern described in detail above.

[0096] Referring now to Fig. 20, a roll 160 of material 162 having a threedimensional pattern 164 provided on at least one surface of thereof, such as an upper surface 166 of the material 162, is illustrated, together with a knife assembly 168 which is actuated by an actuator 170 to cut at least a portion of the material 162 withdrawn from the roll 160 into elongated segments 172 of decorative grass 174. The material 162 is substantially identical in construction to the sheet of material 10 having a three-dimensional pattern 28 provided on at least a portion of one of the surfaces thereof as hereinbefore described with reference to Fig. 1. That is, the material 162 can be made of paper (untreated or treated in any manner), cellophane, metal foil, polymer film, non-polymer film, fabric (woven or nonwoven or synthetic or natural), cardboard, burlap, or laminations or combinations thereof. The material 162 may vary in color. Further, the material 162 may comprise other decorative patterns or designs in addition to the three-dimensional pattern 164 which are printed, etched, and/or embossed thereon. In addition, the material 162 may have various colorings, coatings, flocking and/or metallic finishes, applied separately or simultaneously, or may be characterized totally or partially by pearlescent, opaque, translucent, transparent, tinted, iridescent or the like, qualities. Each

of the above-named characteristics may occur alone or in combination. Moreover, each surface of the material 162 may vary in the combination of such characteristics.

[0097] The three-dimensional pattern 164 provided on the material 162 may be of any geometrical shape or design which will enhance the aesthetic qualities of a decorative grass 174 formed from the material 162, or if desired, from the sheet of material 10. That is, the three-dimensional pattern 164 provided on the material 162 may be a lace pattern, curlicues, paisleys, swirls, squiggles, and any shape generally associated with botanical items such as leaves, petals, stems, roots, fruits and any other biomorphic shapes. Further, the three-dimensional pattern 164 may be produced by printing and/or embossing the material 162, by etching at least a portion of one surface of the material 162 or by any other method known in the art.

In another optional mode, the actuator 170 may rotate the knife assembly 168 to the second direction 184 wherein the cutting elements 180 of the knife assembly 168 severingly re-engages the slit web of material 186, thereby causing the slit web of material 186 to be severed into the elongated segments 172 of the decorative grass 174 (Figs. 20 and 21). The actuator 170 may comprise a hydraulic or pneumatic cylinder or a motor and gear

arrangement or any other form of arrangement suitable for moving the knife assembly 168 in the first direction 182 and, when desired, in the second direction 184. After the cutting elements 180 of the knife assembly 168 have cuttingly severed the desired portion of the material 162, the actuator 170 is actuated to move the knife assembly 168 in a storage direction 188 to a storage position disposed a distance above the material 162 as opposed to the cutting positions previously described. Alternatively, the leading edge 178 of the sheet of material 162 may be run across a first knife edge (not shown) set in a support surface (also not shown) to form the slit web of material 186 wherein the actuator 170 actuates a second knife edge (not shown) to cross-cut the slit web of material 186 into elongated segments 172 of decorative grass 174. Apparatus and methods for making decorative grass and the like is disclosed in U.S. Patent No. 4,646,388, entitled, "Apparatus For Producing Weighed Charges Of Loosely Aggregated Filamentary Material", issued to Weder et al. on March 3, 1987, which is hereby expressly incorporated by reference herein.

ムと

[0102] The elongated segment 172 of the decorative grass 174 has a width 194 and a length 196 which define the boundaries of the elongated segment 172. The three-dimensional pattern 164 may be confined within the boundaries of the elongated segment 172 of the decorative grass 174

(substantially as shown in Fig. 21); or the three-dimensional pattern 164 may be randomly positioned on the elongated segment 172 so that only a portion of the three-dimensional pattern 164 lies within the boundaries of the elongated segment 172 of the decorative grass 174. The width 194 and length 196 of the elongated segment 172 are determined by the design and operational parameters of the knife assembly 168. Further, the width 194 and length 196, as well as the thickness of the elongated segment 172, can vary widely and will generally be dependent on the requirements of individual consumers. For most uses, however, such as when the elongated segments, such as segment 172, are used as a packing material or a decorative grass for use in filling Easter baskets, candy boxes, preparing floral arrangements, wreaths and other decorative purposes, the elongated segments will have a width 194 of from about 0.020 inches to about 0.125 inches, a length 196 of from about 2 inches to about 24 inches and a thickness from about 0.0005 inches to about 0.0030 inches. Further, in many instances the elongated segments 172 are intertwined into a cohesive mass whereby the elongated segments are provided with flat portions, random longitudinal curls, random transverse curls, crimped or crinkled portions and combinations thereof.

[0103] The segments of the decorative grass 174, such as the segment 172, can be produced clear or in almost any color required, and the colors can

be transparent or opaque including but not exclusively red, green, yellow, pink, orchid and blue. Further, the upper and lower surfaces 190 and 192 of the elongated segment 172 may be of the same color, or of different colors, or have various coatings, flockings, and/or metallic finishes applied thereto.

[0105] As previously stated with reference to the elongated segment 172, the width 194a and length 196a of the elongated segment 172a are determined by the design and operational parameters of the knife assembly 168. Further, the width 194a and length 196a, as well as the thickness, of the elongated segment 172a can vary widely and will generally be dependent on the requirements of individual consumers. For most uses, however, the elongated segment 172a will have a width 194a of from about 0.020 inches to about 0.125 inches, a length 196a of from about 2 inches to about 24 inches, and a thickness from about 0.0005 inches to about 0.0030 inches.

[0106] The segments of the decorative grass 174a, such as the segment 172a, can be produced clear or in almost any color required, and the colors can be transparent or opaque including but not exclusively red, green, yellow, pink, orchid and blue. Further, the upper and lower surfaces 190a and 192a of the segment 172a may be of the same color, or of different colors, or have various coatings, flockings, and/or metallic finishes applied thereto.

**[0107]** Referring now to Fig. 23, another embodiment of an elongated segment 172b of a decorative grass 174b is illustrated. The elongated segment 172b of the decorative grass 174b is provided with an upper surface 190b and a lower surface 192b. The upper surface 192b is provided with a three-dimensional pattern 164b and embossed material 200, such as a design, slogan etc., thereon. The elongated segment 172b has a width 194b and a length 196b which define the boundaries of the elongated segment 172b. The three-dimensional pattern 164b and the embossed material 200 may be confined within the boundaries of the elongated segment 172b of the decorative grass 174b (substantially as shown in Fig. 23); or the three-dimensional pattern 164b and/or the embossed material 200 may be randomly positioned on the elongated segment 172b so that only a portion of the three-dimensional pattern 164b or a portion of the embossed material 200 lie within the boundaries of the elongated segment 172b of the decorative grass 174b.

and 172a, the width 194b and length 196b of the elongated segment 172b are determined by the design and operational parameters of the knife assembly 168. Further, the width 194b and length 196b, as well as the thickness of the elongated segment 172b can vary widely and will generally be dependent on the requirements of individual consumers. For most uses, however, the

elongated segment 172b will have a width 194b of from about 0.020 inches to about 0.125 inches, a length 196b of from about 2 inches to about 24 inches and a thickness from about 0.0005 inches to about 0.0030 inches.

[0109] The segments of the decorative grass 174b, such as the segment 172b, can be produced clear or in almost any color required, and the colors can be transparent or opaque including but not exclusively red, green, yellow, pink, orchid and blue. Further, the upper and lower surfaces 190b and 192b of the segment 172b may be of the same color, or of different colors, or have various coatings, flockings, and/or metallic finishes applied thereto.

[0111] As previously stated with reference to the elongated segments 172, 172a and 172b, the width 194c and length 196c of the elongated segment 172c are determined by the design and operational parameters of the knife assembly 168. Further, the width 194c and length 196c, as well as the thickness, of the elongated segment 172c can vary widely and will generally be dependent on the requirements of individual consumers. For most uses, however, the elongated segment 172c will have a width 194c of from about 0.020 inches to about 0.125 inches, a length 196c of from about 2 inches to about 24 inches and a thickness from about 0.0005 inches to about 0.0030 inches.

[0112] The segments of the decorative grass 174c, such as the segment 172c, can be produced clear or in almost any color required, and the colors can be transparent or opaque including but not exclusively red, green, yellow, pink, orchid and blue. Further, the upper and lower surfaces 190c and 192c of the segment 172c may be of the same color, or of different colors, or have various coatings, flockings, and/or metallic finishes applied thereto.

**[0113]** Referring now to Fig. 25, another embodiment of an elongated segment 172d of a decorative grass 174d is illustrated. The elongated segment 172d of the decorative grass 174d is provided with an upper surface 190d and a lower surface 192d. The upper surface 190d is provided with a three-dimensional pattern 164d, printed design and/or printed materials 198d and embossed material 200d, such as a design, slogan etc., thereon. The elongated segment 172d has a width 194d and a length 196d which define the boundaries of the elongated segment 172d. The three-dimensional pattern 164d, the printed design and/or printed material 198d and the embossed material 200d may be confined within the boundaries of the elongated segment 172d of the decorative grass 174d (substantially as shown in Fig. 25); or the three-dimensional pattern 164d, the printed design and/or printed material 198d and/or the embossed material 200d may be randomly positioned on the elongated segment 172d so that only a portion of the three-dimensional pattern 164d,

and/or the printed design and/or printed material 198d, and/or the embossed material 200d, lie within the boundaries of the elongated segment 172d of the decorative grass 174d. In the embodiment shown in Fig. 25, the printed design and/or printed material 198d and the embossed material 200d are out or register with one another.

**[0114]** It should be noted that while the three-dimensional pattern 164 - 164d, the printed design and/or printed material 198, 198c and 198d, and/or the embossed material 200, 200c and 200d have been illustrated on the upper surfaces 190-190d of the segments 172-172d of the decorative grass 174-174d, the three-dimensional pattern 164-164d, the printed design and/or printed material 198, 198c and 198d and the embossed material 200, 200c and 200d can be provided on the lower surfaces 192-192d of the segments 172-172d of the decorative grass 174-174d, or on both the upper surfaces 190-190d of the segments 172-172d and the lower surfaces 192-192d of the segments 172-172d.

**[0115]** Further, as previously stated with reference to the elongated segments 160, 160a, 160b and 160c, the width 194d and length 196d of the elongated segment 172d are determined by the design and operational parameters of the knife assembly 168. Further, the width 194d and length

196d, as well as the thickness, of the elongated segment 172d can vary widely and will generally be dependent on the requirements of individual consumers. For most uses, however, the elongated segment 172d will have a width 194d of from about 0.020 inches to about 0.125 inches, a length 196d of from about 2 inches to about 24 inches and a thickness from about 0.0005 inches to about 0.0030 inches.

[0116] The segments of the decorative grass 174d, such as the segment 172d, can be produced clear or in almost any color required, and the colors can be transparent or opaque including but not exclusively red, green, yellow, pink, orchid and blue. Further, the upper and lower surfaces 190d and 192d of the segment 172d may be of the same color, or of different colors.